

What is claimed is:

1. A supplement for humans or other mammals for restoring growth hormone levels comprising unmodified rapidly absorbed free-form amino acids, in an amino acid stack which does not include non-amino acid supplementation, and which, when provided to a user, stimulate release of growth hormones in the user, said amino acids comprising:
  - (a) amino acids and derivatives thereof chosen from the group:
    - (i) carnitine
    - (ii) methionine
    - (iii) N-acetyl-cysteine
  - (b) free form amino acids chose from the group:
    - (i) lysine
    - (ii) glutamine
    - (iii) ornithine
    - (iv) arginine
    - (v) glycine.
2. The supplement of claim 1 wherein said supplement is a nutritional supplement.
3. The supplement of claim 2 wherein said supplement is provided in the form of one of a tablet, a capsule or a liquid.
4. The supplement of claim 1 wherein said supplement is provided as a suitably selected formulation for topical application.
5. The supplement of claim 4 wherein said formulation is either a cream or an ointment.

6. The supplement of claim 5 wherein said formulation further comprises suitably selected compounds to encourage uptake of said supplement through the skin.
7. A supplement for humans or other mammals for restoring growth hormone levels comprising unmodified rapidly absorbed free-form crystalline amino acids, in an amino acid stack which does not include non-amino acid supplementation, and which, when provided to a user, stimulates release of growth hormone in the user, wherein said amino acids comprise the amino acids and derivatives thereof methionine, carnitine, N-acetyl-cysteine, lysine, glutamine, ornithine, glycine and arginine.
8. The supplement of claim 7 wherein said supplement is a nutritional supplement.
9. The supplement of claim 8 wherein said supplement is provided in the form of one of a tablet, a capsule or a liquid.
10. The supplement of claim 7 wherein said supplement is provided as a suitably selected formulation for topical application.
11. The supplement of claim 10 wherein said formulation is either a cream or an ointment.
12. The supplement of claim 11 wherein said formulation further comprises suitably selected compounds to encourage uptake of said supplement through the skin.
13. A supplement for humans or other mammals for restoring growth hormone levels comprising of unmodified rapidly absorbed free-form amino acids, in an amino acid stack and additives, and which, when provided to a user, stimulates release of growth hormone in the user, said amino acids comprising of the amino acids and derivatives thereof methionine, carnitine, N-acetyl-cysteine, lysine, glutamine, ornithine, glycine and arginine.

14. The supplement of claim 13 wherein said supplement is a nutritional supplement.
15. The supplement of claim 14 wherein said supplement is provided in the form of one of a tablet, a capsule or a liquid.
16. The supplement of claim 13 wherein said supplement is provided as a suitably selected formulation for topical application.
17. The supplement of claim 16 wherein said formulation is either a cream or an ointment.
18. The supplement of claim 17 wherein said formulation further comprises suitably selected compounds to encourage uptake of said supplement through the skin.
19. A supplement for restoring growth hormone levels, the supplement for humans or other mammals in a daily dosage and comprising unmodified rapidly absorbed free-form crystalline amino acids, in an amino acid stack which does not include non-amino acid supplementation, and which when provided to a user, stimulates release of growth hormone in the user, wherein said amino acids or derivatives thereof in the daily dosage comprising:
  - (a) Lysine in the mass range 500mg and 1500mg
  - (b) Arginine in the mass range 500mg and 1500mg
  - (c) Ornithine in the mass range 100mg and 500mg
  - (d) Glutamine, or L-Pyroglutamic Acid in the mass range 100mg and 500mg
  - (e) Glycine in the mass range 25mg and 500mg
  - (f) Methionine in the mass range 0mg and 500mg
  - (g) Carnitine or Acetyl-Carnitine in the mass range 50mg and 1000mg
  - (h) N-Acetyl-Cysteine in the mass range 50mg and 1000mg.
20. The supplement of claim 19 wherein said supplement is a nutritional supplement.

21. The supplement of claim 20 wherein said supplement is provided in the form of one of a tablet, a capsule or a liquid.
22. The supplement of claim 19 wherein said supplement is provided as a suitably selected formulation for topical application.
23. The supplement of claim 22 wherein said formulation is either a cream or an ointment.
24. The supplement of claim 23 wherein said formulation further comprises suitably selected compounds to encourage uptake of said supplement through the skin.
25. The supplement of claim 19, wherein said amino acids or derivatives thereof in the daily dosage comprising:
  - (a) 1500mg of L-Lysine
  - (b) 1500mg of L-Arginine
  - (c) 250mg of L-Ornithine
  - (d) 50 mg of Glycine
  - (e) 250mg of L-Glutamine
  - (f) 50 mg of DL- Methionine or L-Methionine
  - (g) 500mg of L-Carnitine or Acetyl-L-Carnitine
  - (h) 250mg of N-Acetyl-Cysteine.
26. The supplement of claim 25 wherein said supplement is a nutritional supplement.
27. The supplement of claim 26 wherein said supplement is provided in the form of one of a tablet, a capsule or a liquid.

28. The supplement of claim 25 wherein said supplement is provided as a suitably selected formulation for topical application.
29. The supplement of claim 28 wherein said formulation is either a cream or an ointment.
30. The supplement of claim 29 wherein said formulation further comprises suitably selected compounds to encourage uptake of said supplement through the skin.
31. A supplement for restoring growth hormone levels, the supplement for humans or other mammals in a daily dosage and comprising unmodified rapidly absorbed free-form crystalline amino acids, in an amino acid stack and additives , and which when provided to a user, stimulates release of growth hormone in the user, wherein said amino acids or derivatives thereof in the daily dosage comprising:
  - (a) Lysine in the mass range 500mg and 1500mg
  - (b) Arginine in the mass range 500mg and 1500mg
  - (c) Ornithine in the mass range 100mg and 500mg
  - (d) Glutamine, or L-Pyroglutamic Acid in the mass range 100mg and 500mg
  - (e) Glycine in the mass range 25mg and 500mg
  - (f) Methionine in the mass range 0mg and 500mg
  - (g) Carnitine or Acetyl-Carnitine in the mass range 50mg and 1000mg
  - (h) N-Acetyl-Cysteine in the mass range 50mg and 1000mg.
32. The supplement of claim 31 wherein said supplement is a nutritional supplement.
33. The supplement of claim 32 wherein said supplement is provided in the form of one of a tablet, a capsule or a liquid.
34. The supplement of claim 31 wherein said supplement is provided as a suitably selected formulation for topical application.

35. The supplement of claim 34 wherein said formulation is either a cream or an ointment.
36. The supplement of claim 36 wherein said formulation further comprises suitably selected compounds to encourage uptake of said supplement through the skin.
37. The supplement of claim 31, wherein said amino acids or derivatives thereof in the daily dosage comprising:
  - (a) 1500mg of L-Lysine
  - (b) 1500mg of L-Arginine
  - (c) 250mg of L-Ornithine
  - (d) 50 mg of Glycine
  - (e) 250mg of L-Glutamine
  - (f) 50 mg of DL- Methionine or L-Methionine
  - (g) 500mg of L-Carnitine or Acetyl-L-Carnitine
  - (h) 250mg of N-Acetyl-Cysteine.
38. The supplement of claim 37 wherein said supplement is a nutritional supplement.
39. The supplement of claim 38 wherein said supplement is provided in the form of one of a tablet, a capsule or a liquid.
40. The supplement of claim 37 wherein said supplement is provided as a suitably selected formulation for topical application.
41. The supplement of claim 40 wherein said formulation is either a cream or an ointment.
42. The supplement of claim 41 wherein said formulation further comprises suitably selected compounds to encourage uptake of said supplement through the skin.

43. A supplement for humans or other mammals for restoring growth hormone levels comprising unmodified rapidly absorbed free-form amino acids, in an amino acid stack and additives, and which, when provided to a user, stimulate release of growth hormones in the user, said amino acids comprising:
  - (a) amino acids and derivatives thereof chosen from the group:
    - (i) carnitine
    - (ii) methionine
    - (iii) N-acetyl-cysteine
  - (b) free form amino acids chose from the group:
    - (i) lysine
    - (ii) glutamine
    - (iii) ornithine
    - (iv) arginine
    - (v) glycine.
44. The supplement of claim 43 wherein said supplement is a nutritional supplement.
45. The supplement of claim 44 wherein said supplement is provided in the form of one of a tablet, a capsule or a liquid.
46. The supplement of claim 43 wherein said supplement is provided as a suitably selected formulation for topical application.
47. The supplement of claim 46 wherein said formulation is either a cream or an ointment.
48. The supplement of claim 47 wherein said formulation further comprises suitably selected compounds to encourage uptake of said supplement through the skin.